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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/020,815	12/12/2001	Gilbert Wolrich	10559/614001P12853	8919

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FISH & RICHARDSON, PC
12390 EL CAMINO REAL
SAN DIEGO, CA 92130-2081

EXAMINER	
LEROUX, ETIENNE PIERRE	

ART UNIT	PAPER NUMBER
2161	

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/020,815	WOLRICH ET AL.	
	Examiner	Art Unit	
	Etienne P LeRoux	2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *03 June 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,3-9,11-17,19-25 and 27-31* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,3-9,11-17,19-25 and 27-31* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 December 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/3/2005 has been entered.

Claim Status

Claims 1, 3-9, 11-17, 19-25 and 27-31 are pending; claims 2, 10, 18 and 26 having been cancelled. Claims 1, 3-9, 11-17, 19-25 and 27-31 are rejected as detailed below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1, 3-6, 8, 9, 11-14, 16, 17, 19-22, 24, 25 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Pat No 6,822,958 issued to Branth et al (hereafter Branth), in view of US Pat No 5,850,395 issued to Hauser et al (hereafter Hauser).

Claims 1, 9, 17 and 25:

Branth discloses:

storing addresses in a first queue entry as a circular linked list wherein the first entry [master entry, Fig 6, col 8, lines 1-28] points to a subsequent entry [Fig 6, 316b] and to a final field [Fig 6, 316d], each of the stored addresses referring to a stored data buffer [Fig 5, main cell memory 224] and including a cell count that indicates a number of cells [Fig 6, 342 col 8, line 28] contained in the data buffer, each of the stored addresses including a cell count

retrieving a first address from the first queue entry; and modifying the linked list of addresses of the first queue entry based on the cell count of the first address retrieved [Fig 9, col 19, lines 24-36]

Branth discloses the elements of the claimed invention as noted above but is silent regarding decrementing the cell count of the first address each time the first address is retrieved. Hauser discloses decrementing the cell count of the first address each time the first address is retrieved [col 15, lines 36-43]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Branth to include decrementing the cell count of the first

address each time the first address is retrieved as taught by Hauser for the purpose of providing a queue system for managing the transmission of data packets [col 15, lines 30-45].

Claim 3:

The combination of Branth and Hauser discloses the elements of claim 1 as noted above and furthermore, Branth discloses determining the cell count is zero [Fig 9, col 18, lines 45-52].

Claim 4:

The combination of Branth and Hauser discloses the elements of claims 1 and 3 as noted above and furthermore, Branth discloses setting the first address as the head address of the first queue entry and linking a second address to the first address of the first queue entry [Fig 6, 339, 343 linked to member entry]

Claim 5:

The combination of Branth and Hauser discloses the elements of claims 1, 3 and 4 as noted above and furthermore, Branth discloses setting the second address as a tail address of the first queue [Fig 6, 316c]

Claim 6:

The combination of Branth and Hauser discloses the elements of claims 1 and 3-5 as noted above and furthermore, Branth discloses linking a third address to the first queue entry by storing the third address in the location indicated by the tail address [Fig 6].

Claims 8:

The combination of Branth and Hauser discloses the elements of claims 1, 3 and 4 as noted above and furthermore, Branth discloses wherein the first queue entry is stored as part of a queue array having a plurality of linked queue entries [Fig 6].

Claim 11:

The combination of Branth and Hauser discloses the elements of claim 9 as noted above and furthermore, Branth discloses determining the cell count is zero [Fig 9, col 18, lines 45-52].

Claim 12:

The combination of Branth and Hauser discloses the elements of claim 9 and 11 as noted above and furthermore, Branth discloses setting the first address as the head address of the first queue entry and linking a second address to the first address of the first queue entry [Fig 6, 339, 343 linked to member entry]

Claim 13:

The combination of Branth and Hauser discloses the elements of claims 9, 11 and 12 as noted above and furthermore, Branth discloses setting the second address as a tail address of the first queue [Fig 6, 316c]

Claim 14:

The combination of Branth and Hauser discloses the elements of claims 9 and 11-13 as noted above and furthermore, Branth discloses linking a third address to the first queue entry by storing the third address in the location indicated by the tail address [Fig 6, 316d]

Claim 16:

The combination of Branth and Hauser discloses the elements of claims 9, 11 and 12 as noted above and furthermore, Branth discloses wherein the first queue entry is stored as part of a queue array having a plurality of linked queue entries [Fig 6].

Claim 19:

The combination of Branth and Hauser discloses the elements of claim 17 as noted above and furthermore, Branth discloses determining the cell count is zero [Fig 9, col 18, lines 45-52].

Claim 20:

The combination of Branth and Hauser discloses the elements of claims 17 and 19 as noted above and furthermore, Branth discloses setting the first address as the head address of the first queue entry and linking a second address to the first address of the first queue entry [Fig 6, 339, 343 linked to member entry]

Claim 21:

The combination of Branth and Hauser discloses the elements of claims 17, 19 and 20 as noted above and furthermore, Branth discloses setting the second address as a tail address of the first queue [Fig 6, 316c]

Claim 22:

The combination of Branth and Hauser discloses the elements of claims 17 and 19-21 as noted above and furthermore, Branth discloses linking a third address to the first queue entry by storing the third address in the location indicated by the tail address [Fig 6, 316d]

Claim 24:

The combination of Branth and Hauser discloses the elements of claims 17, 19 and 20 as noted above and furthermore, Branth discloses wherein the first queue entry is stored as part of a queue array having a plurality of linked queue entries [Fig 6].

Claim 27:

The combination of Branth and Hauser discloses the elements of claim 25 as noted above and furthermore, Branth discloses determining the cell count is zero [Fig 9, col 18, lines 45-52].

Claim 28:

The combination of Branth and Hauser discloses the elements of claims 25 and 27 as noted above and furthermore, Branth discloses setting the first address as the head address of the first queue entry and linking a second address to the first address of the first queue entry [Fig 6, 339, 343 linked to member entry]

Claim 29:

The combination of Branth and Hauser discloses the elements of claims 25, 27 and 28 as noted above and furthermore, Branth discloses setting the second address as a tail address of the first queue [Fig 6, 316c]

Claim 30:

The combination of Branth and Hauser discloses the elements of claims 25 and 27-29 as noted above and furthermore, Branth discloses linking a third address to the first queue entry by storing the third address in the location indicated by the tail address [Fig 6, 316d]

Claims 7, 15, 23 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Branth and Hauser and further in view of US Pat No 6,320,861 issued to Adam et al, (hereafter Adam).

Claim 7:

The combination of Branth and Hauser discloses the elements of claims 1 and 3-5 as noted above but is silent regarding incrementing a queue count each time an address is linked to the first queue entry. Adam discloses incrementing a queue count each time an address is linked to the first queue entry [col 6, lines 35-45]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify above combination of references to, include incrementing a queue count each time an address is linked to the first queue entry as taught by Adam for the purpose of maintaining the correct functioning of queue whereby elements can only be removed in the same order in which they were inserted, that is, it follows a first in, first out (FIFO) constraint. It follows that when a new item is added to the queue the queue size has increased and therefore the queue count must be accordingly increased.

Claim 15:

The combination of Branth and Hauser discloses the elements of claims 9 and 11-13 as noted above but is silent regarding incrementing a queue count each time an address is linked to the first queue entry. Adam discloses incrementing a queue count each time an address is linked to the first queue entry [col 6, lines 35-45]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify above combination of references to include incrementing a queue count each time an address is linked to the first queue entry as taught by Adam for the purpose of maintaining the correct functioning of queue whereby

elements can only be removed in the same order in which they were inserted, that is, it follows a first in, first out (FIFO) constraint. It follows that when a new item is added to the queue the queue size has increased and therefore the queue count must be accordingly increased.

Claim 23:

The combination of Branth and Hauser discloses the elements of claims 17 and 19 –21 as noted above but is silent regarding incrementing a queue count each time an address is linked to the first queue entry. Adam discloses incrementing a queue count each time an address is linked to the first queue entry [col 6, lines 35-45]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify above combination of references to include incrementing a queue count each time an address is linked to the first queue entry as taught by Adam for the purpose of maintaining the correct functioning of queue whereby elements can only be removed in the same order in which they were inserted, that is, it follows a first in, first out (FIFO) constraint. It follows that when a new item is added to the queue the queue size has increased and therefore the queue count must be accordingly increased.

Claim 31:

The combination of Branth and Hauser discloses the elements of claims 25 and 27-29 as noted above but fails to disclose incrementing a queue count each time an address is linked to the first queue entry. Adam discloses incrementing a queue count each time an address is linked to the first queue entry [col 6, lines 35-45]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Branth to include incrementing a queue count each time an address is linked to the first queue entry as taught by Adam for the purpose of maintaining the correct functioning of queue whereby elements can only be removed in the same

order in which they were inserted, that is, it follows a first in, first out (FIFO) constraint. It follows that when a new item is added to the queue the queue size has increased and therefore the queue count must be accordingly increased.

Response to Arguments

Applicant's arguments with respect to claims 1-31 have been considered but are moot in view of the new ground(s) of rejection necessitated by applicant's claim amendments.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne P. LeRoux whose telephone number is (571) 272-4022. The examiner can normally be reached Monday through Friday, 8:00am-4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic can be reached on (571) 272-4023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Etienne LeRoux

7/18/2005

MOHAMMAD ALI
PRIMARY EXAMINER